years the new standard of the Joint Commission of Accreditation of Hospitals. Deficiencies in hospital care are attributed to poor performance, rarely to lack of knowledge, and often to a breakdown in a hospital system—for example, dispensing drugs. Three prerequisites for a successful quality assurance program are said to be strong commitment by the medical staff and hospital administrator, acceptance of responsibility for the program without reservation by a multidisciplinary committee and an enthusiastic chairperson who consults frequently with the quality assurance coordinator.

Chapter 2 makes clear that the entire hospital staff and all employees are a part of the program. Quality is defined "in terms of an attitude . . . that perfection can be achieved and that an error by anyone . . . is not acceptable." The program focuses on this "dynamic attitude," not the setting of criteria and standards which had much to do with the "disillusion with . . . traditional quality assurance mechanisms." "Credentialling, restriction of privileges, chart review, auditing, and education programs failed to yield results commensurate with the time and effort they required."

In Chapter 3 the author lists the multiple sources of information that are used to "indicate where the specific problems might lie"-for example, formal committee reports, informal complaints, clinical computer data and incident reports. The integration of risk management with quality assurance is well illustrated.

Chapter 4 describes the use of "generic screens" to discover a "patient condition or patient care event that might signal one or more problems in the health care system"-such as punctures or lacerations of internal organs during operations, patient falls and prophylactic antibiotics. Once "evidence of suspected or potential problems" is obtained, a "generic-screen type of audit" is used "for tracking down problems." "Instead of setting scores of criteria, as in the diagnosis and procedure audits, the number is limited, usually to no more than six. . . ." The criteria are "critical measures that could affect outcome." These audits are completed in a few hours and up to 100 have been completed in one year. Numerous examples are given of medical problems that were pursued by this method. The same method is used in analysing potential problems in hospital management or hospital systems-for example, correctness of codes on patient charts and length of time required to discharge a patient.

Two other methods are used, besides the informational audit: special studies-such as problems in maintaining the daily surgical schedule, and team evaluation of patient care units by direct observation and surveys of staff and patients.

In Chapter 5 the author lists the titles of the members of the quality control committee, which is a committee of the board of trustees. Neither the committee nor the director can take remedial action. "It was up to the appropriate medical staff committee or hospital committee or administrator." In response to legal advice, the committee does not review the activities of individual persons, only "patient care trends and group performances. . . ." Benefits of the new program are a more vital program of continuing education, inclusion of surveys of patient attitudes, formation of a committee to deal with "unacceptable behavior by physicians," and a more positive attitude toward quality assurance and accountability throughout the hospital.

The final chapter briefly alludes to the difficulties in making peer review more effective, the desirability of "involving patients more in the provision of their own care," and the need to deal with complex contemporary issues by such means as establishing a biomedical ethics committee.

This book is a worthwhile contribution to the bloated literature on quality assurance because it describes a working program that is generally regarded as a prototype that satisfies fully the new requirements of the Joint Commission on Accreditation of Hospitals. It represents the practical state of the art of quality assessment and clearly recognizes that quality assurance requires different mechanisms than the usual audit committee. Full partnership between the hospital components of care and medical care in joint responsibility is shown to be possible. Involving all employees and seeking patient opinions are also unique. The technical methods are not as new as the author proposes, but they are clearly superior to the educational audit model that has been followed for the past 15 years. Written so as to be understandable by those lacking a medical background, this book is highly recommended to anyone who has any interest in or responsibility for any aspect of hospital-wide quality assurance.

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MANUAL OF ULTRASONOGRAPHY—Kenneth J. W. Taylor, MD, PhD, FACP, Professor of Radiology, Department of Diagnostic Radiology; Paula Jacobson, RT, RDMS, Diagnostic Sonographer, Department of Diagnostic Radiology; Carol A. Talmont, RT, RDMS, Diagnostic Sonographer, Department of Diagnostic Radiology, and Ralph Winters, RT, RDMS, Diagnostic Sonographer, Department of Diagnostic Radiology, Yale-New Haven Hospital, New Haven, Connecticut; drawings by Caroline R. Taylor, MD. Churchill Livingstone Inc., 19 West 44th Street, New York City (10036), 1980. 211 pages, \$22.50.

This little book is intended as a companion to the Atlas of Gray Scale Ultrasonography but it stands alone as an introduction to the basics of ultrasonography. "Basic Principles," "Instrumentation" and "Artifacts and Pitfalls" are the first three chapters, written by Dr. Taylor. The other chapters are written by the diagnostic sonographers in his department except for the chapters "Obstetrics," "The Liver" and "The Biliary Tree," on which he collaborated. The procedures are those used at the Yale-New Haven Hospital, New Haven, Connecticut.

The book establishes the groundwork in defining the modality, proceeds to elaborate on how the various ultrasound machines effect an image and deals with the mechanics of developing an ultrasound laboratory. From there the authors discuss particular areas including obstetrics, gynecology, the liver and biliary system, the pancreas, the kidney, the spleen, the adrenal glands, abscesses, neurosonography and biopsy techniques. Anticipating the kinds of information sent by a clinician in ordering a sonogram, the text helpfully describes for technologists the anatomy of the area, the function of the organ, and the appropriate laboratory studies that are used to evaluate the suspected problem. Each new medical term is clearly and appropriately explained. This is an ideal format for technologists but elementary knowledge to physicians, who can skip to the areas on scanning technique, artifacts and how they are produced, and a description of the sonographic appearances of normal and abnormal organs. The excellent sonographic photographs (white images on a black background) are accompanied by well-labeled, adjacent line drawings that illustrate the text. The chapter on artifacts is particularly helpful, enabling the newcomer to grasp which sonographic findings are significant and which are not.

The book does not have a section on ultrasonography of the vascular system or the parathyroids, and only a scanty section on neurosonology of the newborn head, but much of the neural investigation has occurred since the book was published. Elaboration on obtaining Amode scans of the head for midline determination suggests this technique is more useful than it is, since computerized tomography has really supplanted this test.

The book is not an encyclopedic treatise on ultrasound, and does not address itself to such intricacies as the lobar and segmental anatomy of the liver, but, in general, it is a lucid compact exposition of the basics and, as such, an appropriate tool for those who are in training, or in the initial stages of their ultrasound exposure.

Manual of Ultrasonography, as an introduction to ultrasound, is a successful, effective and well-organized volume.

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PROFILE OF THE RESIDENCY TRAINED FAMILY PHYSICIAN IN THE UNITED STATES 1970-1979—Editor: John P. Geyman, MD, Professor and Chairman, Department of Family Medicine, University of Washington School of Medicine, Seattle. Appleton-Century-Crofts, 292 Madison Avenue, New York City (10017), 1981. 68 pages, \$12.00 (paperback).

This short (68 page) report has as its goal a description of the residency-trained family practice physicians reviewed through the years 1970 to 1979. Dr. John Geyman used four sources of information, which follow the same general pattern for tracking resident graduates. The experience at the University of Minnesota, the Medical College of Virginia, the University of Washington and New York State programs, as well as the American Academy of Family Physicians, gives solid data, and serves to identify and describe the family physicians of this era. An interpretation of this material and its implications are then given as a final chapter.

The material is presented in an organized and superbly edited fashion to make it easily comparable. There are surprising similarities in the findings of the study. The persons presenting these studies are the leaders in the academic training of family practice physicians. The stated goal of describing practice patterns, perceptions and geographic distributions of residency-trained family practice physicians in the United States is achieved. The highlights of the booklet are that a majority of the physician graduates of the family practice programs are continuing to practice as family physicians, for the most part, in association with other physicians. Review of the hospital privileges of the physicians profiled has disclosed that over 90 percent have a hospital practice and have hospital privileges. Two thirds of the graduates provide obstetrical care, a third have privileges for complicated obstetrics. Two thirds participate in surgeries for major surgical procedures, and almost all include minor surgical procedures in their office practices. There is a low percentage of hospital privilege denial. There is a large participation in teaching part time. Most of the graduates of the programs surveyed felt that their training had resulted in good preparation for practice, high satisfaction with practice and gravitation to smaller nonmetropolitan areas. This indicated that family practice was reaching a goal of training doctors who will deliver care in underserved areas. There is a high retention rate of graduates of the programs in the state where the training took place.

To all doctors and other persons interested in the delivery of health care, this unique and well-designed attempt to review family practice training during the last ten years will serve as a landmark. The new specialty of family practice and the doctors that the family practice residency training programs graduate are achieving goals and objectives set by the family practice movement, and to a certain extent those set by certain legislative bodies. To anyone interested in health care policy this honest attempt to assess the impact of a new specialty on the health care delivery of the nation is helpful. This slim volume is a must in the library of any serious student of family medicine and health care.

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WILLIS'S OXFORD LECTURES—Edited and Introduced by Kenneth Dewhurst, TD, DPhil, FRCPsych. Sandford Publications, Manor House, Sandford-on-Thames, Oxford OX4 4YN, England. 181 pages. Price: 9 English Pounds, limited to 750 copies.

Thomas Willis, the discoverer of the anastomosis connecting the blood vessels at the base of the brain, received his undergraduate and medical education at Oxford and set himself up in a very successful practice in London at the age of 25. He died in 1675 and was posthumously honored by being buried among England's great in Westminster Abbey.

Although he is best known for his eponymic circle and his studies in neuroanatomy, he was, in fact, widely interested in all aspects of medicine and pharmacology. This is evident from his many and important published writings, and more even from the variety of subjects of the lectures he gave at Oxford University. In addition to the breadth and depth of his clinical knowledge and the astuteness of his observations, Willis was also famous for the elegant style he used in his oral and written presentations.

Following the practice of his day, Willis gave his lectures in Latin, and we owe Professor Kenneth Dewhurst a debt of gratitude for having made the lectures available to us in a flawless translation into English.

In doing so, Professor Dewhurst has opened up the works of yet one more of the great English physicians whose lives and writings he has been publishing in the past decades. It is interesting that in addition to six books dealing with various aspects of English medicine, Professor Dewhurst has also published an excellent and insightful book on the German poet Friedrich Schiller. Schiller also had had a complete medical training and his medical and psychological writings have been translated by Dewhurst into English from the original German.

It so happens that the book here reviewed, *Thomas Willis's Oxford Lectures*, far exceeds the often too-narrow concerns of physicians; it also is a valuable addition to the libraries of the laymen whose interests include the cultural and scientific thought of 17th century England.

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